Indexes

Author Index, Volume 25, 1987

A

Abramovitch, Rudolph A., **Kishore**, Dharma, **Konieczny**, Marek, and **Dauter**, Zbigniew. Reaction of Pyridine 1-Oxide with Methyl Propiolate: A Pyrido-oxepine and Other Novel Products. **13.**

Ahn, Soon Kil. See **Quesada**, Martha L., **283.**

Alberola, Angel, **Antolín**, Luis F., **González**, Ana M., **Laguna**, Miguel, A., and **Pulido**, Francisco J. Base-induced Ring Cleavage of 4-Functionalized 3-Unsubstituted Isoxazoles. Synthesis of 2-Aminopyrimidines and Pyrimidine-2(3*H*)-thiones. **393.**

Antolín, Luis, F. See **Alberola**, Angel, **393.**

Aoki, Tsutomu, **Nagata**, Wataru, **Yoshimura**, Yohko, **Nishikawa**, Junko, and the Late **Tori**, Kazuo. Stereochemical Studies of 1-Oxacephams by Means of NMR Spectroscopy. A Useful Shift Rule for Determination of the 3-Substituent Configuration. **321.**

Aurrecoechea, Jose M. See **Katritzky**, Alan R., **387.**

B

Bahadir, Müfit and **Korte**, Friedhelm. New Slow Release Application Techniques with Heterocyclic Herbicides in Aquatic Weed Control. **333.**

Ban, Yoshio. See **Wakamatsu**, Takeshi, **43; Yoshida**, Kiyoshi, **47.**

Barbara, Claude. See **Ficini**, Jacqueline, **329.**

Barton, Derek H. R., **Bridon**, Dominique, and **Zard**, Samir Z. The Invention of New Radical Chain Reactions. Part XIII. High Yielding Decarboxylative Chalcogenation of Aliphatic and Alicyclic Acids. **449.**

Bauer, Ludwig. See **Hamby**, James M., **25.**

Becker, David A. See **Danheiser**, Rick L., **277.**

Bhandary, Krishna. See **Pelletier**, S. William, **365.**

Birnbaum, George I., **De Clercq**, Erik, **Hatfield**, Peter W., and **Robins**, Morris J. Synthesis and Conformational Studies of 4-Carbamoyl-1-[(2-hydroxyethoxy)methyl]-5-(methylamino)imidazole and Derivatives as New Acyclonucleoside Analogues. **493.**

Bobbitt, James M. and **Bourque**, André J. Synthesis of Heterocycles Using Aminoacetals. **601.**

Bock, Mark G. See **Hill**, Richard K., **515.**

Boeckman, Jr., Robert K., **Tagat**, Jayaram R., and **Johnston**, Brian H. The Chemistry of Cyclic Vinyl Ethers 4: Cyclization of Unsaturated Cyclic Vinyl Ether Epoxides. **33.**

Bourque, André J. See **Bobbitt**, James M., **601.**

Breslow, Ronald. See **Chmielewski**, Jean, **533.**

Bridon, Dominique. See **Barton**, Derek H. R., **449.**

Brossi, Arnold. See **Venugopalan**, Bindumadhavan, **359.**

Brown, Herbert C. and **Vara Prasad**, J. V. N. Hydroboration of Heterocyclic Olefins - A Versatile Route for the Synthesis of Both Racemic and Optically Active Heterocyclic Compounds. **641.**

C

Cama, Lovji D. See **Shah**, Nalini V., **221.**

Cameron, Stuart. See **Colvin**, Ernest W., **133.**

Castanedo, Ricardo, **Zetina**, Carlos Bernardo, and **Maldonado**, Luis Angel. An Alternate Synthesis of Furoventalene Using an Extension of Hagiwara's Construction of the 3-Methylfuran Moiety. **175.**

Cava, Michael P. See **Rawal**, Viresh H., **701.**

Chandrasekharan, Sundaram. See **Rajeswari**, Sundaramoorthi, **659.**

Chau, Diem Dieu. See **Cheung**, H. T. Andrew, **507.**

Chen, Barbara. See **Kahn**, Michael, **29.**

Chen, Szu-ying. See **Pelletier**, S. William, **365.**

Cheung, H. T. Andrew, **Smal**, Mary, and **Chau**, Diem Dieu. Synthesis of Multi-^{13}C-enriched Methotrexate for NMR Studies of Drug - Enzyme Interactions. **507.**

Chidester, Constance G. See **Szmuszkovicz**, Jacob, **563.**

Chmielewski, Jean and **Breslow**, Ronald. Increasing the Racemase Activity versus Transaminase Activity of a

Pyridoxal Enzyme Model by the Attachment of a Rigid Base. **533.**
Chokshi, Hitesh P. See **Pelletier**, S. William, **365.**
Chu. Shih-Der. See **Kametani**, Tetsuji, **241.**
Colvin, Ernest W. and **Cameron**, Stuart. Selective Chemical Transformations of the Trichothecene, 4β-Acetoxy-scirpene-3α,15-diol. **133.**
Cvetovich, Raymond J. See **Natsugari**, Hideaki, **19.**

D

Danheiser, Rick L. and **Becker**, David A. Application of Allenylsilanes in a Regiocontrolled [3+2] Annulation Route to Substituted Isoxazoles. **277.**
Danishefsky, Samuel and **Feigelson**, Gregg B. Polonovski Reactions of Mitosane Derivatives. **301.**
Dauter, Zbigniew. See **Abramovitch**, Rudolph, A., **13.**
DeAmicis, Carl V. See **Pirrung**, Michael C., **189.**
De Clercq, Erik. See **Birnbaum**, George I., **493.**
Delahunty, Claire M. See **Macdonald**, Timothy L., **305.**
Depezay, Jean-Claude. See **Le Merrer**, Yves, **541.**
Desmaële, Didier. See **Ficini**, Jacqueline, **329.**
Dickinson, Charlotte M. See **Goldsmith**, David J., **291.**
Dieck-Abularach, Teofilo. See **Liu**, Hsing-Jang, **245.**
Dorsey, Gordon O. See **Stotter**, Philip L., **251.**
Dugar, Sundeep. See **Miller**, R. Bryan, **217.**
Dujardin, Gilles. See **Poirier**, Jean-Marie, **399.**
Dupre, Brian. See **Meyers**, A. I., **113.**
Durêault, Annie. See **Le Merrer**, Yves, **541.**

E

Egawa, Hiroyuki. See **Hirai**, Yoshiro, **201.**
Ehrhart, Wendell A. See **Taylor**, Edward C., **343.**
Eichenauer, Ulrich, **Huisgen**, Rolf, **Mitra**, Abhijit, and **Moran**, Joaquin Rodriguez. The Reaction of Aliphatic Diazo Compounds with Highly Electrophilic Ethylene Derivatives. **129.**
Endo, Rokuro. See **Kawamoto**, Isao, **123.**
Epperson, James R. See **Miller**, R. Bryan, **217.**

F

Feigelson, Gregg B. See **Danishefsky**, Samuel, **301.**
Ficini, Jacqueline, **Barbara**, Claude, **Desmaële**, Didier, and **Ouerfelli**, Ouathek. Intramolecular Ene Reaction: The Use of 1,7-Enynes in the Synthesis of Hydroxylated Methylenecyclohexane Derivatives. **329.**
Fioravanti, Stefania, **Loreto**, Maria Antonietta, **Pellacani**, Lucio, and **Tardella**, Paolo Antonio. C-Morpholino- or Piperidino-*v*-triazoles from 1,1-Enediamines and Ethyl Azidoformate. **433.**
Firestone, Raymond A. Stereospecificity in Diels-Alder and 1,3-Dipolar Cycloadditions Does Not Prove the Concerted Mechanism. **61.**
Foxman, Bruce, M. See **Rosenblum**, Myron, **419.**
Friedman, Martin D. See **Stotter**, Philip L., **251, 259.**
Fujimura, Yasuo. See **Hamana**, Masatomo, **229, 235.**
Fukami, Naoki. See **Isobe**, Minoru, **521.**
Fukuda, Yukitoshi, **Utimoto**, Kiitiro, and **Nozaki**, Hitosi. Preparation of 2,3,4,5-Tetrahydropyridines from 5-Alkynylamines under the Catalytic Actions of Au(III). **297.**
Fukumoto, Keiichiro. See **Nemoto**, Hideo, **51.**

G

Giandinoto, Salvatore. See **Schlecht**, Matthew F., **485.**
Ginsburg, David. See **Kapon**, Moshe, **11.**
Glinski, Jan A. See **Pelletier**, S. William, **365.**

Go, Kuantee. See **Pelletier**, S. William. **365.**
Goldsmith, David J., **Dickinson**, Charlotte M., and **Lewis**, Arthur J. Kinetic and Thermodynamic Enolization of 3-Pyranones. **291.**
Golič, Ljubo, **Stropnik**, Črtomir, **Stanovnik**, Branko, and **Tišler**, Miha. Functionalized Enamines in the Synthesis of Some Heterocyclic Compounds. **347.**
Gómez Contreras, Fernando, **Lora-Tamayo**, Manuel, and **Sanz**, Ana María. Diazapolycyclic Compounds XXVI. Diazaquinone Adducts from Isoprenoid Compounds. **193.**
González, Ana M. See **Alberola**, Angel, **393.**
Goto, Toshio. See **Isobe**, Minoru, **521.**
Govindachari, Tuticorin R. See **Rajeswari**, Sundaramoorthi, **659.**
Grambal, Frantisek. See **Walterova**, Daniela, **89.**
Gravier, Christine. See **Le Merrer**, Yves, **541.**
Greck, Christine. See **Le Merrer**, Yves, **541.**
Greene, Joseph R. See **Hill**, Richard K., **515.**

H

Hagenah, Jeffrey A. See **Jung**, Michael E., **117.**
Hamana, Masatomo, **Fujimura**, Yasuo, and **Haradahira**, Terushi. Reactions of Quinoline and 4-Chloroquinoline 1-Oxides with Phenoxyacetonitrile, Chloromethylphenylsulfone, and Methylthiomethyl-*p*-tolylsulfone. **229.**
Hamana, Masatomo, **Fujimura**, Yasuo, and **Nawata**, Yoshiharu. Reactions of Quinoline 1-Oxide with Cyanoacetic Acid Derivatives Bearing Leaving Groups. **235.**
Hamby, James M. and **Bauer**, Ludwig. Degradations of 1-Methyl-3-benzenesulfonyloxyalloxazine by Nucleophilic Reagents. **25.**
Hannon, Francis J. See **Winkler**, Jeffrey D., **55.**
Haradahira, Terushi. See **Hamana**, Masatomo, **229.**
Hata, Tadashi. See **Kawamoto**, Isao, **123.**
Hatfield, Peter W. See **Birnbaum**, George I., **493.**
Heathcock, Clayton H. and **van Geldern**, Thomas W. Total Synthesis of (±)-Norsecurinine. **75.**
Herbert, Richard B., **Knagg**, Eric, **Organ**, Helen M., **Pasupathy**, Vinayager, and **Towlson**, David S. A Biogenetically Patterned Synthesis of Deoxycryptopleuridine. **409.**
Hey, John P. See **Winkler**, Jeffrey D., **55.**
Hill, Kenneth A. See **Stotter**, Philip L., **259.**
Hill, Richard K., **Sawada**, Seiji, **Bock**, Mark G., and **Greene**, Joseph R. Synthesis of Cephalotaxine Analogs. **515.**
Hirai, Yoshiro, **Egawa**, Hiroyuki, **Wakui**, Yuko, and **Yamazaki**, Takao. A Photochemistry of 1-(1-Phenylvinyl)-3,4-dihydroisoquinoline. **201.**
Hon, Yung-Son. See **Kraus**, George A., **377.**
Honda, Toshio. See **Kametani**, Tetsuji, **241.**
Hori, Kozo. See **Nomura**, Keiichi, **167.**
Hoshino, Osamu, **Ogasawara**, Hiromichi, **Suzuki**, Masaji, and **Umezawa**, Bunsuke. A Novel Synthesis of (±)-Noraporphine Alkaloids, (±)-Wilsonirine and (±)-Nordomesticine. **151.**
Hoshino, Osamu, **Ogasawara**, Hiromichi, **Takahashi**, Atsuo, and **Umezawa**, Bunsuke. A Synthesis of (±)-1- and (±)-3-Hydroxy-(C)-homoaporphines *via meta*-Bridged Aromatic Lactams. **155.**
Huisgen, Rolf. See **Eichenauer**, Ulrich, **129.**
Hwang, Chrong-Shiong and **Reusch**, William. Regio and Stereoselective Rearrangements of Stereoisomeric 7-Oxirylbicyclo[4.2.0]octan-7-ols. **589.**
Hwang, Yun. See **Quesada**, Martha L., **283.**

I

Ikeda, Yoshiya. See **Sato**, Eisuke, **65.**
Inamoto, Naoki. See **Okazaki**, Renji, **183.**
Inouye, Yoshinobu, **Niwayama**, Satomi, **Okada**, Tomonori, and **Kakisawa** Hiroshi. Regioselective Effects of the Allylic Heteroatoms in 1,3-Dipolar Cycloaddition of Nitrones to Several Allyl Derivatives. **109.**
Ishizuka, Makoto. See **Nomura**, Keiichi, **167.**

Isobe, Minoru, **Fukami**, Naoki, **Nishikawa**, Toshio, and **Goto**, Toshio. Synthesis of Chiral Cyclohexanes from Levoglucosenone and Its Application to an Indole Alkaloid Reserpine. **521.**

J

Jeong, Nak Shin. See **Quesada**, Martha L., **283.**

Johnston, Brian H. See **Boeckman, Jr.**, Robert K., **33.**

Jones, Robert J. See **Rawal**, Viresh H., **701.**

Joseph, Joseph P. See **Nair**. Vijay, **337.**

Joshi, Balawant S. See **Pelletier**, S. William, **365.**

Jung, Michael E. and **Hagenah**, Jeffrey A. Preparation and Cycloaddition of Functionalized 4,6-Dialkylpyrone-5-carboxylates. Synthesis of Bicyclic Lactones and Substituted Benzoates. **117.**

K

Kaftory, Menachem. See **Kapon**, Moshe, **11.**

Kahn, Michael, **Chen**, Barbara, and **Zieske**, Paul. The Design and Synthesis of a Nonpeptide Mimic of Erabutoxin. **29.**

Kakisawa, Hiroshi. See **Inouye**, Yoshinobu, **109.**

Kalaus, György. See **Szabó**, Lajos, **157.**

Kallmerten, James and **Plata**, Daniel J. Synthetic Studies of the Nargenicins. 2. Synthesis of the "Northern Half" of Nargenicin A_1. **145.**

Kálmán, Alajos. See **Szabó**, Lajos, **157.**

Kametani, Tetsuji, **Chu**, Shih-Der, and **Honda**, Toshio. Asymmetric Synthesis of 4-Acetoxy-3-hydroxyethylazetidin-2-one, a Key Intermediate for the Preparation of Penem and Carbapenem Antibiotics. **241.**

Kametani, Tetsuji. See **Nagahara**, Takayasu, **729; Nemoto**, Hideo, **51.**

Kanaoka, Yuichi. See **Sato**, Eisuke, **65.**

Kanbara, Hiroshi. See **Kobayashi**, Yuichi, **549.**

Kanda, Yutaka. See **Takahashi**, Takashi, **139.**

Kapon, Moshe, **Kaftory**, Menachem, **Knowles**, Philip, **Weinberg**, Olga, and **Ginsburg**, David. Propellanes. Part LXXXIII. Solid State Conformations of Several Substituted Triaza[3.3.3]propellanes and of an Oxadiaza[3.3.3]-propellane. **11.**

Katayama, Tetsuo. See **Toda**, Takashi, **79.**

Katritzky, Alan R., **Aurrecoechea**, Jose M., **Quian**, Keping, **Koziol**, Anna E., and **Palenik**, Gus J. Thermal Base-induced Rearrangement of a Pyridinium Salt to an Azepin. **387.**

Kawamoto, Isao, **Endo**, Rokuro, **Suzuki**, Kosato, and **Hata**, Tadashi. Efficient Syntheses of a New Penem Antibiotic, Sodium (5*R*,6*S*)-2-(2-Fluoroethylthio)-6-[(1*R*)-1-hydroxyethyl]penem-3-caboxylate. **123.**

Kawashima, Akihiko. See **Sugimoto**, Toyonari, **83.**

Kim, Deukjoon. See **Quesada**, Martha L., **283.**

Kim, Joon Wan. See **Quesada**, Martha L., **283.**

Kim, Moohi Yoo. See **Quesada**, Martha L., **283.**

Kishi, Yoshito. See **Tino**, Joseph A., **97.**

Kishore, Dharma. See **Abramovitch**, Rudolph A., **13.**

Kitajima, Yoshifumi. See **Tanaka**, Tsuguo, **463.**

Knagg, Eric. See **Herbert**, Richard B., **409.**

Kneisley, Alyssa. See **Ziegler**, Frederick E., **105.**

Knowles, Philip. See **Kapon**, Moshe, **11.**

Kobayashi, Shū. See **Mukaiyama**, Teruaki, **205.**

Kobayashi, Yuichi, **Uchiyama**, Hiroshi, **Kanbara**, Hiroshi, **Kusakabe**, Masato, and **Sato**, Fumie. Base-assisted Migration of Trimethylsilyl Group from Carbon to Oxygen in γ-Trimethylsilyl-γ,δ-unsaturated Alcohols, γ-Trimethylsilyl-γ,δ-epoxy Alcohols, and β-Trimethylsilyl-β,γ-epoxy Alcohols to the Corresponding Silyl Ethers. **549.**

Kolonits, Pál. See **Szabó**, Lajos, **157.**

Konieczny, Marek. See **Abramovitch**, Rudolph A., **13.**

Korte, Friedhelm. See **Bahadir**, Müfit, **333.**

Koziol, Anna E. See **Katritzky**, Alan R., **387.**
Kraus, George A. and **Hon**, Yung-Son. The Total Synthesis of Lycopodine Using Bridgehead Intermediates. **377.**
Kusakabe, Masao. See **Kobayashi**, Yuichi, **549.**
Kutney, James P. Studies in Plant Tissue Culture. The Synthesis and Biosynthesis of Indole Aldaloids. **617.**

L

Laguna, Miguel A. See **Alberola**, Angel, **393.**
Laredo, Georgina Cecilia and **Maldonado**, Luis Angel. 2-Cyano-6-methoxytetrahydropyran, a Useful Protected Cyanohydrin for 2-Substituted Cyclohexenone Synthesis. **179.**
Laurian, Lloyd G. See **Szmuszkovicz**, Jacob, **563.**
Le Merrer, Yves, **Duréault**, Annie, **Greck**, Christine, **Micas-Languin**, Dominique, **Gravier**, Christine, and **Depezay**, Jean-Claude. Synthesis of Diepoxides and Diaziridines, Precursors of Enantiomerically Pure α-Hydroxy and α-Amino Aldehydes or Acids, from D-Mannitol. **541.**
Lewis, Arthur J. See **Goldsmith**, David J., **291.**
Lewis, Michael D. See **Tino**, Joseph A., **97.**
Lin, Peter. See **Schlessinger**, Richard, **315.**
Liu, Hsing-Jang and **Dieck-Abularach**, Teofilo. Studies towards the Total Synthesis of Mexicanolide. Stereoselective Construction of the CD Ring Segment for a Convergent Approach. **245.**
Lora-Tamayo, Manuel. See **Gómez Contreras**, Fernando, **193.**
Loreto, Maria Antonietta. See **Fioravanti**, Stefania, **433.**

M

Macdonald, Timothy L., **Delahunty**, Claire M., and **Sawyer**, J. Scott. Synthetic Studies of Periplanone A, a Sex Pheromone of *Periplaneta americana*. **305.**
Majetich, George and **Ringold**, Clay. A Stereospecific Synthesis of (±)-Perforenone. **271.**
Maldonado, Luis Angel. See **Castanedo**, Ricardo, **175; Laredo**, Georgina Cecilia, **179.**
Malon, Petr. See **Walterova**, Daniela, **89.**
McCloskey, Patrick J. and **Schultz**, Arthur G. Enantioselective Total Syntheses of Sibirine, Nitramine, and Isonitramine. **437.**
McGuinness, Brian F. See **Verdine**, Gregory L., **577.**
Meyers, A. I. and **Dupre**, Brian. An Asymmetric Total Synthesis of Unnatural (+)-Anisomycin. **113.**
Micas-Languin, Dominique. See **Le Merrer**, Yves, **541.**
Miller, R. Bryan, **Dugar**, Sundeep, and **Epperson**, James R. Formation of 3,3-Disubstituted Indolenines from Intramolecular Nitrene Reaction with Isoquinoline and Naphthalene Moieties. **217.**
Minabe, Masahiro. See **Toda**, Takashi, **79.**
Minter, David E. See **Stotter**, Philip L., **251.**
Misaki, Yohji. See **Sugimoto**, Toyonari, **83.**
Mitra, Abhijit. See **Eichenauer**, Ulrich, **129.**
Miyaguchi, Masao. See **Tanaka**, Tsuguo, **463.**
Miyazaki, Toru. See **Tanaka**, Tsuguo, **463.**
Mochisuki, Rosalina K. See **Tanaka**, Tsuguo, **463.**
Moran, Joaquin Rodriguez. See **Eichenauer**, Ulrich, **129.**
Mukaiyama, Teruaki and **Kobayashi**, Shū. The Tandem Michael-aldol Reaction Catalyzed by Trityl Perchlorate. **205.**

N

Nagahara, Takayasu and **Kametani**, Tetsuji. Enantioselective Syntheses of Carbapenem Antibiotics. **729.**
Nagata, Wataru. See **Aoki**, Tsutomu, **321.**
Nair, Vijay and **Joseph**, Joseph P. Glycosylation of Silyl Ethers: A Novel Synthesis of Oligosaccharides and Aryl Glycosides. **337.**
Nakamura, Hideo. See **Wakamatsu**, Takeshi, **43.**
Nakanishi, Koji. See **Verdine**. Gregory L., **577.**
Natsugari, Hideaki, **Turos**, Edward, **Weinreb**, Steven M., and **Cvetovich**, Raymond J. Further Studies on Ste-

reoselective Synthesis of Vicinal Diamines from 3,6-Dihydrothiazine-1-imines. **19.**
Nawata, Yoshiharu. See **Hamana**, Masatomo, **235.**
Nemoto, Hideo, **Shitara**, Eiki, **Fukumoto**, Keiichiro, and **Kametani**, Tetsuji. An Aromatic Version of Claisen Rearrangement of Lactonic Silyl Enolates - A New Access to Potential Intermediates for Eudesmane Type of Sesquiterpenes. **51.**
Nemoto, Hisao. See **Takahashi**, Takashi, **139.**
Nishikawa, Junko. See **Aoki**, Tsutomu, **321.**
Nishikawa, Toshio. See **Isobe**, Minoru, **521.**
Niwayama, Satomi. See **Inouye**, Yoshinobu, **109.**
Nomura, Keiichi, **Hori**, Kozo, **Ishizuka**, Makoto, and **Yoshii**, Eiichi. Studies on the Total Synthesis of Granaticin: Synthesis of (±)-7-Deoxygranaticin 12-*O*-Methyl Ether from Chrysazin. **167.**
Nozaki, Hitosi. See **Fukuda**, Yukitoshi, **297.**

O

Ogasawara, Hiromichi. See **Hoshino**, Osamu, **151, 155.**
Ogasawara, Kunio. See **Takano**, Seiichi, **69.**
Ohashi, Mamoru. See **Yamada**, Shuzo, **287.**
Okada, Tomonori. See **Inouye**, Yoshinobu, **109.**
Okamoto, Masaya. See **Tanaka**, Tsuguo, **463.**
Okazaki, Renji, **Unno**, Masafumi, and **Inamoto**, Naoki. A New Synthesis of 1,3-Thiazine Derivatives Having a Dithiolane Ring and Their Reductive Cleavage with Sodium Cyanoborohydride. **183.**
Organ, Helen M. See **Herbert**, Richard B., **409.**
Otaki, Shizuo. See **Takano**, Seiichi, **69.**
Ouerfelli, Ouathek. See **Ficini**, Jacqueline, **329.**

P

Palenik, Gus J. See **Katritzky**, Alan R., **387.**
Pandit, Upendra K. See **Stoit**, Axel R., **7.**
Párkányi, Lászoló. See **Szabó**, Lajos, **157.**
Pasupathy, Vinayager. See **Herbert**, Richard B., **409.**
Pellacani, Lucio. See **Fioravanti**, Stefania, **433.**
Pelletier, S. William, **Joshi**, Balawant S., **Glinski**, Jan, A., **Chokshi**, Hitesh P., **Chen**, Szu-ying, **Bhadary**, Krishna, and **Go**, Kuantee. The Structures of Four New C_{19}-Diterpenoid Alkaloids from *Aconitum forrestii* Stapf. **365.**
Pinnick, Harold W. See **Stewart**, Jon D., **213.**
Piozzi, Franco, **Rodriguez**, Benjamin, and **Savona**, Giuseppe. Advances in the Chemistry of the Furanoditerpenoids from *Teucrium* Species. **807.**
Pirrung, Michael C. and **DeAmicis**, Carl V. Photochemical Cyclobutanone Expansions. **189.**
Plata, Daniel J. See **Kallmerten**, James, **145.**
Poirier, Jean-Marie and **Dujardin**, Gilles. Conjugate Addition of Furans to Enones or Their Synthetic Equivalents. **399.**
Poss, Michael. See **Schlessinger**, Richard, **315.**
Pulido, Francisco J. See **Alberola**, Angel, **393.**

Q

Quesada, Martha L., **Kim**, Deukjoon, **Ahn**, Soon Kil, **Jeong**, Nak Shin, **Hwang**, Yun, **Kim**, Moohi Yoo, and **Kim**, Joon Wan. Studies towards the Total Synthesis of Strychnine (I). **283.**
Quian, Keping. See **Katritzky**, Alan R., **387.**

R

Rajeswari, Sundaramoorthi, **Chandrasekharan**, Sundaram, and **Govindachari**, Tuticorin R. Syntheses of Indolizidine Alkaloids - A Review. **659.**
Rampal, Jang B. See **Taylor**, Edward C., **343.**
Rawal, Viresh H., **Jones**, Robert J., and **Cava**, Michael P. Review of Synthetic Studies toward CC-1065, PDE-I, and

PDE-II. **701.**
Reusch, William. See **Hwang**, Chrong-Shiong, **589.**
Ringold, Clay. See **Majetich**, George, **271.**
Robins, Morris J. See **Birnbaum**, George I., **493.**
Rodriguez, Benjamin. See **Piozzi**, Franco, **807.**
Rosenblum, Myron, **Foxman**, Bruce M., and **Turnbull**, Mark M. Stereoselective Synthesis of 1,2-Diethoxy- and 1, 4-Dioxino[2,3-*b*]furans Using Organoiron Reagents. **419.**

S

Sakai, Toshiaki. See **Yamada**, Shuzo, **287.**
Sakuma, Yasuji. See **Yoshida**, Kiyoshi, **47.**
Sandris, Constantine. See **Tsolomitis**, Athanase, **569.**
Sanz, Ana María. See **Gómez Contreras**, Fernando, **193.**
Sato, Eisuke, **Ikeda**, Yoshiya, and **Kanaoka**, Yuichi. Photosensitized Oxygenation of 2-Pyridones. **65.**
Sato, Fumie. See **Kobayashi**, Yuichi, **549.**
Sato, Nobuaki. See **Takano**, Seiichi, **69.**
Savona, Giuseppe. See **Piozzi**, Franco, **807.**
Sawada, Seiji. See **Hill**, Richard K., **515.**
Sawyer, J. Scott. See **Macdonald**, Timothy L., **305.**
Schaus, John M. See **Wender**, Paul A., **263.**
Scahill, Terrence A. See **Szmuszkovicz**, Jacob, **563.**
Schlecht, Matthew F. and **Giandinoto**, Salvatore. Bicycloannulation of 3-Indolylenamines with Cyclohexenone: A Facile Preparation of Potential Neurotransmitter Analogs. **485.**
Schlessinger, Richard, **Lin**, Peter, **Poss**, Michael, and **Springer**, James. Michael Addition Reactions of Unsaturated Esters with Lithium Enolates Derived from Vinylogous Urethanes. **315.**
Schultz, Arthur G. See **McCloskey**, Patrick J., **437.**
Shah, Nalini V. and **Cama**, Lovji D. Synthesis of a Novel Carbapenem-potassium (5*R*,6*R*)-1,1-Difluoro-2-phenyl-6-(1*R*-hydroxyethyl)-carbapen-2-em-3-carboxylate. The Use of a New *N*-Protecting Group in β-Lactam Synthesis. **221.**
Shiely, Robert W. See **Stotter**, Philip L., **251.**
Shitara, Eiki. See **Nemoto**, Hideo, **51.**
Šimánek, Vilim. See **Walterova**, Daniela, **89.**
Smal, Mary. See **Cheung**, H. T. Andrew, **507.**
Springer, James. See **Schlessinger**, Richard, **315.**
Stanovnik, Branko. See **Golič**, Ljubo, **347.**
Stewart, Jon D. and **Pinnick**, Harold W. Preparation of α-Arylsulfonyl Lactams. **213.**
Stoit, Axel R. and **Pandit**, Upendra K. An Approach to Indoloquinolizidine Alkaloids *via* Folate Models. **7.**
Stotter, Philip L., **Friedman**, Martin D., **Dorsey**, Gordon O., **Shiely**, Robert W., **Williams**, Robert F., and **Minter**, David E. Quinuclidine•boranes as Intermediates in Formation and Isolation of Functionalized Quinuclidine Systems. **251.**
Stotter, Philip L., **Hill**, Kenneth A., and **Friedman**, Martin D. Facile Preparation of Two 5-(α-Acetoxyethyl)-3-quinuclidinones *via* Intramolecular Functionalization. **259.**
Stropnik, Črtomir. See **Golič**, Ljubo, **347.**
Sugimoto, Iwao. See **Sugimoto**, Toyonari, **83.**
Sugimoto, Toyonari, **Sugimoto**, Iwao, **Kawashima**, Akihiko, **Yamamoto**, Yukishi, **Misaki**, Yohji, and **Yoshida**, Zen-ichi. Synthesis and Electrochemical Behavior of 1,4-Dithiin Ring Condensed Systems. **83.**
Suzuki, Kosato. See **Kawamoto**, Isao, **123.**
Suzuki, Masaji. See **Hoshino**, Osamu, **151.**
Szabó, Lajos, **Kolonits**, Pál, **Kalaus**, György, **Kálmán**, Alajos, **Párkányi**, László, and **Szántay**, Csaba. Synthesis of Vinca Alkaloids and Related Compounds. XXXIII. Formation of a New Ring System *via* Addition of Methyl Acrylate to Indoloquinolizine Derivatives. **157.**
Szántay, Csaba. See **Szabó**, Lajos, **157.**
Szmuszkovicz, Jacob, **Chidester**, Constance G., **Laurian**, Lloyd G., and **Scahill**, Terrence A. An Unusual Product Obtained from the Reaction of Aniline with 1-(2-Chlorocyclopentyl)-piperidine. **563.**

T

Tagat, Jayaram R. See **Boeckman, Jr.**, Robert K., **33.**
Takahashi, Atsuo. See **Hoshino**, Osamu, **155.**
Takahashi, Takashi, **Nemoto**, Hisao, **Kanda**, Yutaka, and **Tsuji**, Jiro. Macroring Contraction Methodology. 2. Total Synthesis of Hagenolide by [2,3]-Wittig Rearrangement of 13-Membered Diallylic Ether. **139.**
Takano, Seiichi, **Sato**, Nobuaki, **Otaki**, Shizuo, and **Ogasawara**, Kunio. The Total Synthesis of (±)-Sikkimotoxin *via* the Benzo-Peterson Reaction. **69.**
Tanaka, Tsuguo, **Miyaguchi**, Masao, **Mochisuki**, Rosalina K., **Tanaka**, Senichiro, **Okamoto**, Masaya, **Kitajima**, Yoshifumi, and **Miyazaki**, Toru. The 2,2'-Spirobichroman — 1,1'-Spirobiindan-4,4'-diol Rearrangement. II. **463.**
Tardella, Paolo Antonio. See **Fioravanti**, Stefania, **433.**
Taylor, Edward C., **Ehrhart**, Wendell A., **Tomlin**, Clive O. S., and **Rampal**, Jang B. A Novel "Ring-switching" Amination: Conversion of 4-Amino-5-cyanopyrimidine to 4,6-Diamino-5-cyanopyrimidine. **343.**
Tino, Joseph A., **Lewis**, Michael D., and **Kishi**, Yoshito. A New, Efficient Synthesis of the Left Half of Narasin. **97.**
Tišler, Miha. See **Golič**, Ljubo, **347.**
Toda, Takashi, **Yoshida**, Masaaki, **Katayama**, Tetsuo, and **Minabe**, Masahiro. Reactions of Diphenylcyclopropenone with Hydrazine Derivatives: Formation of Pyrazolone Derivatives *via* 3-Aminocinnamohydrazides. **79.**
Tomasz, Maria. See **Verdine**, Gregory L., **577.**
Tomlin, Clive O. S. See **Taylor**, Edward C., **343.**
Tori, Kazuo. See **Aoki**, Tsutomu, **321.**
Towlson, David S. See **Herbert**, Richard B., **409.**
Tsolomitis, Athanase and **Sandris**, Constantine. Synthesis of 2-Substituted 3(2*H*)-Isothiazolones from 2-Substituted 5-Aroyl-3(2*H*)-isothiazolones. **569.**
Tsuji, Jiro. Contributions of Professor Gilbert Stork in Heterocyclic Chemistry. **1.**
Tsuji, Jiro. See **Takahashi**, Takashi, **139.**
Turnbull, Mark M. See **Rosenblum**, Myron, **419.**
Turos, Edward. See **Natsugari**, Hideaki, **19.**

U

Uchiyama, Hiroshi. See **Kobayashi**, Yuichi, **549.**
Umezawa, Bunsuke. See **Hoshino**, Osamu, **151, 155.**
Unno, Masafumi. See **Okazaki**, Renji, **183.**
Utimoto, Kiitiro. See **Fukuda**, Yukitoshi, **297.**

V

van Geldern, Thomas W. See **Heathcock**, Clayton H., **75.**
Vara Prasad, J. V. N. See **Brown**, Herbert C., **641.**
Venugopalan, Bindumadhavan and **Brossi**, Arnold. Novel (±)-1-Phenyltetrahydroisoquinolines and 1-Phenylisoquinolines: Potential Intermediates in Alkaloid Synthesis. **359.**
Verdine, Gregory L., **McGuinness**, Brian F., **Nakanishi**, Koji, and **Tomasz**, Maria. Unusual *cis* Stereoselectivity in an Aziridine Cleavage Reaction of Mitomycin C. **577.**

W

Wakamatsu, Takeshi, **Yamada**, Satoshi, **Nakamura**, Hideo, and **Ban**, Yoshio. Enantioselective Synthesis of 16-Membered $\alpha,\beta,\gamma,\delta$-Unsaturated Diolide: A Model System in Elaiopylin. **43.**
Wakui, Yuko. See **Hirai**, Yoshiro, **201.**
Walterova, Daniela, **Malon**, Petr, **Grambal**, Frantisek, and **Šimánek**, Vilim. Circular Dichroic Spectra and Ionization Processes of Some Tropolonic Alkaloids. **89.**
Weinberg, Olga. See **Kapon**, Moshe, **11.**
Weinreb, Steven M. See **Natsugari**, Hideaki, **19.**
Wender, Paul A., **Schaus**, John M., and **White**, Alan W. General Methodology for *cis*-Hydroisoquinoline Synthesis. 3. A Sixteen Step Synthesis of Reserpine. **263.**
White, Alan W. See **Wender**, Paul A., **263.**

Williams, Robert F. See **Stotter**, Philip L., **251.**
Williard, Paul G. See **Winkler**, Jeffrey D., **55.**
Winkler, Jeffrey D., **Hey**, John P., **Hannon**, Francis J., and **Williard**, Paul G. Intramolecular Photocycloadditions on Dioxolenones: An Efficient Method for the Synthesis of Medium-sized Rings. **55.**

Y

Yamada, Satoshi. See **Wakamatsu**, Takeshi, **43.**
Yamada, Shuzo, **Sakai**, Toshiaki, and **Ohashi**, Mamoru. Photo-induced Electron-transfer Oxidation of Nicotine. **287.**
Yamamoto, Yukishi. See **Sugimoto**, Toyonari, **83.**
Yamazaki, Takao. See **Hirai**. Yoshiro, **201.**
Yoshida, Kiyoshi, **Sakuma**, Yasuji, and **Ban**, Yoshio. Synthetic Studies on Oxygenated Aspidosperma Alkaloids: Facile Syntheses of 1-Acetylaspidoalbidine and Deoxyaspidodispermine. **47**
Yoshida, Masaaki. See **Toda**, Takashi, **79.**
Yoshida, Zen-ichi. See **Sugimoto**, Toyonari, **83.**
Yoshii, Eiichi. See **Nomura**, Keiichi, **167.**
Yoshimura, Yohko. See **Aoki**, Tsutomu, **321.**

Z

Zard, Samir Z. See **Barton**, Derek H. R., **449.**
Zetina, Carlos Bernardo. See **Castanedo**, Ricardo, **175.**
Ziegler, Frederick E. and **Kneisley**, Alyssa. A Chiral, Non-racemic C_1-C_7 Erythronolide Synthon Using the 3-Methyl-γ-butyrolactone Strategy. **105.**
Zieske, Paul. See **Kahn**, Michael, **29.**

Subject Index, Volume 25, 1987

A

4-Acetoxy-3-hydroxyethylazetidin-2-one **241**
1-Acetylaspidoalbidine **47**
Acoforesticine **365**
Acoforestine **365**
Acoforestinine **365**
Acoforine **365**
Active Methylene Compound Bearing Leaving Group **229, 235**
Acyclic Stereoselection **549**
Acyclonucleoside **493**
Acyclonucleoside Analogue **493**
Alkynylamine **297**
Allenylsilane **277**
Allo-yohimban **521**
Alkoxyfuran **419**
Amethopterin **507**
Amination **343**
Aminoacetal **601**
α-Amino-acid **541**
3-Aminocinnamohydrazide **79**
4-Amino-5-cyanopyrimidine **343**
2-Aminopirimidine **393**
Anhydro-1-hydroxy-*s*-triazolo[4,3-*a*]quinoxalinium Hydroxide **25**
[3+2]Annulation **277**
Anthracenone **167**
Antitumor Activity **69**
Aquatic Weed **333**
5-Aroyl-3(2*H*)-isothiazolone **569**
Aryl Glycoside **337**
Aspidosperma Alkaloid **47**
Asymmetric [3+2]Dipolar Cycloaddition **241**
Asymmetric Hydroboration **641**
Azaspirodecene **515**
1-Azaspiro[5,5]undecane **437**
Azepine **387**
Azidoformate **433**
Aziridine Ring-opening **577**

B

Barton Oxidation **259**
Benzhydryl Shift Rule **321**
Benzoate **117**
Benzocarbazole **217**
Benzo-Peterson Reaction **69**
Benzylsilane **69**
Bicycloannulation **485**
Birch Reduction **175**
meta-Bridged Aromatic Lactam **155**
Bischler-Napieralski Reaction **515**
Bischler-Napieralski Synthesis of 1-Phenylisoquinoline **359**
Bisindole Alkaloid **617**
Butenolide **399**

C

4-Carbamoyl-1-[(2-hydroxyethoxy)methyl]-5-(methylamino)imidazole **493**
Carbapenem **729**
Carbocation **377**
Cationic Reaction **399**
CC-1065 **701**
Cephalotaxine **515**
Cephem **183**
Chiral Diaziridine **541**
Chiral Diepoxide **541**
Chiral Formamidine **113**
Chiral Isoxazolidine **241**
Chiral Lithio Anion **113**
Chiral Synthesis **659**
Cholinergic **29**
Claisen Rearrangement **51**
Colchicine Alkaloid **89**
Cope Rearrangement **263**
Cotinine **287**
Cryptopleuridine **409**
2-Cyano-6-methoxytetrahydropyran **179**
Cyclization **33**
Cycloaddition **117, 183, 193**
Cycloaddition of Diazomethane and Diazoacetic Ester **129**
Cyclobutanone **189**

D

Dearoylation **569**
Deoxyaspidodispermine **47**
Deoxygenation **133**
Deoxygenative *α*-Substitution **229, 235**
Deoxygenative Vicarious Nucleophilic Substitution **235**
4,6-Diamino-5-cyanopyrimidine **343**
Diazaquinone **193**
Diels-Alder **61**
Diels-Alder Cycloaddition **263, 521**
Diels-Alder Reaction **193**
1,1-Difluorocarbapenem **221**
2,5-Dihydropyrrole **113**
3,6-Dihydrothiazine-1-imine **19**
1,4-Dioxane **419**
Dioxolenone **55**
Diphenylcyclopropenone **79**
1,3-Dipolar Cycloaddition **61, 109, 157, 433**

Diselenide 449
3,3-Disubstitutedindolenine 217
Disulphide 449
Ditelluride 449
Diterpenoid 807
Diterpenoid Alkaloid 365
1,4-Dithiin Ring Condensed System 83
1,3-Dithiolane 183

E

Elaiophylin 43
Electrochemical Behavior 83
Enamine 347, 485, 563
Endoperoxide Intermediate 65
1,1-Enediamine 433
1,7-Enyne 329
Epoxide Ring Opening 43
Epoxysilane 549
Erabutoxin 29
Erthronolide 105
Ethylenetetracarboxylic Ester 129
Eudesmane 51

F

2-Fluoroethylthio Penem 123
Functionalized Bicyclic Lactone 117
β-Furan 807
Furanodecalin 51
Furfuryl Lactonic Silyl Enolate 51
Furoventalene 175

G

Germacrane 305
Glutaraldehyde 179
Glyceraldehyde 549
Glycosylation 337
Gold Catalyst 297
Granaticin Synthesis 167

H

Haagenolide 139
Herbicidal Activity 333
Homoprenylation 175
Hydride Elimination 229
Hydroboration 251
Hydroboration of Heterocyclic Olefin 641
Hydroisoquinoline Synthesis 263
α-Hydroxy-aldehyde 541
1-Hydroxy-(C)-homoaporphine 155
3-Hydroxy-(C)-homoaporphine 155

I

Imidazole 601
Imidazole Analogue 493
Imidazolo[4,5-*b*]quinoxaline 25
Indole 485
Indolizidine Alkaloid 659
Intermolecular Michael Reaction 283
Intramolecular Addition 297
Intramolecular Alkylation of the Protected Cyanohydrin 139
Intramolecular Ene Reaction 329
Intramolecular Michael Reaction 283
Intramolecular Oxidation 259
Intramolecular Sakurai Reaction 271
Intramolecular Witting Reaction 123
Ionization Constant 89
Isonitramine 437
Isoquinoline Alkaloid 359
Isoquinoline Synthesis 601
Isoxazole 277, 393

L

β-Lactam 729
Lead Tetraacetate Oxidation 151
Levoglucosenone 521
Lignan Lactone 69
Losseu Degradation 25

M

Macrocyclization 43
Macrolide 145
Macroring Contraction Methodology 139
D-Mannitol Source of Chirality 541
13-Membered Diallylic Ether 139
16-Membered Diolide 43
Methotrexate 507
Methyl Acrylate, Addition 157
Methylene Cyclohexane 329
1-Methyl-3α,19α-ethano-des-E-eburnamenine Derivative 157
12-Methyl-indolo[2,3-*a*]quinolizine Derivative 157
Methyl Propiolate 13
Methyl Vinyl Ketone 399
Mexicanolide 245
Michael Addition 315
Mitomycin 301
Mitomycin C 577
Mixed Phosphoric Anhydride 43

N

Naphthoquinone Antibiotic 167
Narasin 97
Nargenicin 145
Neo-clerodane 807
New Protecting Group for 2-Azetidinone 221

Nicotine 287
Nine-membered Lactam 47
Nitramine 437
Nitrene Insertion 217
Nitrite Photolysis 259
Nitrogen-carbonyl System 65
Nitrone 109
Nitrosonium Tetrafluoroborate 277
Nonpeptide Mimic 29
Noraporphine Alkaloid 151
Nor-deplancheine 1
Nor-epiisogeissoschizoate 1
Norsecurinine 75
Nucleophilic Addition 97

O

Oligosaccharide 337
Optically Active Heterocyclic Alcohol 641
Optically Active Heterocyclic Borane 641
Optically Active Heterocyclic Boronate 641
Optical Resolution of 1,1'-Spirobiindan-4,4-diol 463
1-Oxachepham 321
Oxalimide Cyclization 123
Oxime-acetate 259
7-Oxirylbicyclo[4.2.0]octan-7-ol 589
Oxonium Ion 97

P

PDE-I 701
PDE-II 701
Penem Antibiotic 123
Penem and Carbapenem Antibiotic 241
Perforenone 271
Periplaneta americana 305
Periplanone A 305
Periplanone B 305
Phenanthroindolizidine 659
Phenanthroquinolizidine 409
Phenolic *N*-Phenethylbromophenylpropionamide 155
1-Phenylisoquinoline 359
1-Phenyltetrahydroisoquinoline 359
Pheromone 305
Photochemistry 201
Photocycloaddition 55
Photosensitized Oxygenation 65
Pictet-Spengler Reaction 515
Plant Enzyme 617
Plant Tissue Culture 617
Polonovski Reaction 301
Polyether Antibiotic 97
Polymer 333
Pomeranz-Fritsch Synthesis 601
Propellane 11
Protected Cyanohydrin 179
Pyranonaphthoquinone 167
Pyranone 291
1- and 2-Pyrazolines 129
Pyrazolone Derivative 79
Pyridine 347
Pyridine 1-Oxide 13
Pyridinium 387
Pyridocarbazole 217
2-Pyridone 65
Pyrido-oxepin 13
Pyridoxal Enzyme Model 533
Pyrimidine 347
Pyrimidinethione 393
Pyrone-5-carboxylate (Coumalate) 117
Pyrrolizidone 75

Q

Quinine, Stereocontrolled Synthetic Approach 251, 259
O-Quinol Acetate 151
Quinoline 563
Quinoline *N*-Oxide 229, 235
Quinuclidine 251, 259
Quinuclidinone 259

R

Racemase Activity 533
Racemization of L-Alanine 533
Rearrangement Catalyzed by $AlCl_3$ and HBr 463
Regioselective Effect of Allylic Heteroatom 109
Regioselective Rearrangement 589
Reserpine 263, 521
Reverse Electron-demand Diels-Alder Reaction 117
Rifamycin S 549
Ring Expansion 589
Ring-Switching Amination 343

S

Scirpenol 133
Securinega Alkaloid 75
Sibirine 437
[2,3]Sigmatropic Rearrangement 19
Sikkimotoxin 69
Silyl Ether 337
Singlet Oxygen 65
Skeletal Rearrangement 83
Slow Release Formulation 333
Spirobenzylisoquinoline 201
2,2'-Spirobichroman-1,1'-spirobiindan-4,4'-diol Rearrangement 463
Spiroketal 33
Stereoselective Birch Reductive Alkylation 437

Stereoselective Rearrangement 589
Strychnine 283
2-Substituted-3(2*H*)-isothiazolone 569
N-Sulfenated-2-azetidinone 221
Sulfonate 213
Sulfone 213
3-Sulfonyloxyalloxazine 25
Sulfur Diimide Dienophile 19
Synthesis of Cyclohexenone 179
Synthesis of Furoventalene 175
Synthesis of 2,2'-Spirobichroman Derivative 463

T

Tandem Michael-aldol Reaction 205
Terpenoid 193
Tetracyanothylene 129
Tetrahydrobenzazepine 515
Tetrahydrofuran 419
Tetrahydropyrane 97, 205
Tetrahydropyridine 297
Tetrahydropyrimidinium Derivative 1
Thiadiazolidine 19
1,3-Thiazine 183
Thienamycin 729
$TiCl_3$ Cleavage to Ketone 259
"Tied up Group" Reactivity 463
Total Synthesis of Norsecurinine 75
Transaminase Activity 533
Transannular Cyclization 47
s-Triazine Herbicide 333
1,2,3-Triazole 433
s-Triazolo[4,3-*a*]quinoxaline 25
Trichothecene 133
Trifluoroacetic Acid 577
N-Trifluoroacetyltetrahydroisoquinolin-7-ol 151
Trithiocarbonate 123
Trityl Perchlorate 205
TTF Formation 83

U

Unsaturated Vicinal Diamine 19

V

δ-Valerolactone 205
Valinol 113
Vicarious Nucleophilic Substitution 229
Vinylogous Urethane Enolates 315
Vinylsilane 549

W

Williamson Ether Synthesis 251
(±)-Wilsonirine 151
[2,3]-Wittig Rearrangement 139
Wolff-Kishner Reduction 521